

Landbird Inventory for Point Reyes National Seashore and Golden Gate NRA

Importance: Golden Gate National Recreation Area (GOGA) and Point Reyes National Seashore (PORE) encompass 160,000 acres of wild areas and diverse habitats, enabling them to host a wide array of birds.

In 1996, the National Park Service (NPS) identified birds as a major component of ecosystems to be inventoried and monitored. Although 35 continuous years of landbird data had been collected at the Palomarin Field Station in PORE, the species found there are not representative of all park lands. Therefore in 1999, NPS contracted PRBO Conservation Science to perform a two-year landbird inventory in GOGA (including the Presidio of San Francisco) and PORE. The goal was to survey the



The Spotted Towhee was among the birds censused at PORE and GOGA.

landbirds (not including waterbirds, shorebirds, or raptors) breeding in the parks. NPS staff continue to keep track of confirmed bird sightings and update the park bird lists.

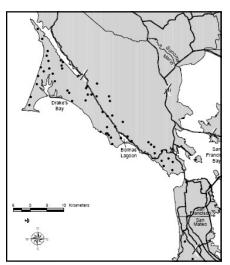


Figure 1. Inventory transects in PORE and GOGA. From Flannery et al, 2001.

Inventory Methods: During the breeding seasons (late April through early July) of 1998 through 2000, PRBO conducted landbird surveys along 61 transects (Figure 1).

Researchers conducted multiple five-minute bird counts along transects during peak singing hours, noting songs, visuals, and calls. They also collected vegetation data to relate the differences in bird species composition and abundance to differences in vegetation. The bird detection data allowed PRBO to derive bird diversity, species richness, and relative abundance. The inventory covered all 22 major habitat alliances (groups of vegetation commonly found together) in the area.

Inventory Findings: This inventory, along with additional sightings by NPS staff and visitors, resulted in observations of 129 species that breed in the parks (Table 1 on back).

- Among the species breeding in the parks were several common ones that migrate to the neotropics during the non-breeding season, including Allen's Hummingbird, Orange-crowned Warbler, Pacific-slope Flycatcher, Swainson's Thrush, and Wilson's Warbler.
- Other breeding birds include year-round residents or short-distant migrant species, such as Song Sparrow (the most abundant), Anna's Hummingbird, Bewick's Wren, Chestnut-backed Chickadee, Purple Finch, Spotted Towhee, Winter Wren, and Wrentit.
- Bishop pine, Douglas fir, red alder, and willow habitats featured among the highest diversity of species.

Table 1. Bird species breeding at either PORE or GOGA, detected during surveys or other confirmed sightings by NPS staff. (This list is limited to those birds defined as breeders, not residents.*)

Pied-billed Grebe	American Black Oystercatcher	Western Scrub Jay	Yellow-rumped Warbler
Ashy Storm-Petrel	Heermann's Gull	American Crow	Black-throated Gray Warbler
Brandt's Cormorant	California Gull	Common Raven	Macgillivray's Warbler
Double-crested Cormorant	Western Gull	Horned Lark	Common Yellowthroat
Pelagic Cormorant	Common Murre	Purple Martin	Wilson's Warbler
American Bittern	Pigeon Guillemot	Tree Swallow	Western Tanager
Great Blue Heron	Tufted Puffin	Violet-green Swallow	Spotted Towhee
Great Egret	Rock Dove	Northern Rough-winged Swallow	California Towhee
Snowy Egret	Band-tailed Pigeon	Bank Swallow, Sand Martin	Chipping Sparrow
Green Heron	Mourning Dove	American Cliff Swallow	Lark Sparrow
Black-crowned Night-Heron	Barn Owl	Barn Swallow	Savannah Sparrow
Canada Goose	Western Screech-Owl	Chestnut-backed Chickadee	Grasshopper Sparrow
Wood Duck	Great Horned Owl	Oak Titmouse	Song Sparrow
Gadwall	Northern Pygmy-Owl	Bushtit	White-crowned Sparrow
Cinnamon Teal	Northern Spotted Owl	Red-breasted Nuthatch	Dark-eyed Junco
Turkey Vulture	Northern Saw-whet Owl	Pygmy Nuthatch	Black-headed Grosbeak
Osprey	Anna's Hummingbird	Brown Creeper	Lazuli Bunting
Northern Harrier	Allen's Hummingbird	Rock Wren	Red-winged Blackbird
Sharp-shinned Hawk	Belted Kingfisher	Bewick's Wren	Tricolored Blackbird
Cooper's Hawk	Nuttall's Woodpecker	House Wren	Western Meadowlark
Red-shouldered Hawk	Downy Woodpecker	Winter Wren	Brewer's Blackbird
Red-tailed Hawk	Hairy Woodpecker	Marsh Wren	Brown-headed Cowbird
American Kestrel	Northern Flicker	Golden-crowned Kinglet	Hooded Oriole
Peregrine Falcon	Pileated Woodpecker	Western Bluebird	Bullock's Oriole
Wild Turkey	Olive-sided Flycatcher	Swainson's Thrush	Purple Finch
California Quail	Western Wood-Pewee	Hermit Thrush	House Finch
Black Rail	Pacific-slope Flycatcher	American Robin	Red Crossbill
Virginia Rail	Black Phoebe	Wrentit	Pine Siskin
Sora	Ash-throated Flycatcher	Northern Mockingbird	Lesser Goldfinch
Common Moorhen	Hutton's Vireo	European Starling	American Goldfinch
American Coot	Warbling Vireo	Orange-crowned Warbler	House Sparrow
Western Snowy Plover	Steller's Jay	Yellow Warbler	Red-masked Parakeet
Killdeer			

*NPS staff may use the Natural Resources Information Portal (type "nrinfo" in a browser on a government connection) to view Certified Species lists of breeders and residents, along with information on abundance and native/non-native status. PRBO is developing a webpage to allow public access to the data and provide the ability to create maps online. Contact NPS or PRBO (see below) for more information.

Additional Resources:

Flannery, M.E., D.L. Humple, G. Ballard, and G.R. Geupel. 2001. Landbird inventory of the National Parks of the San Francisco Bay Area Final Report. Online: http://science.nature.nps.gov/im/units/sfan/Inventory/FinalInventoryReports/POREGOGAPRESlandbirdfinal2001.pdf.

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